

Traumatic Brain Injury

Curriculum Overview

Designed for:

- High school students
- Post-secondary students in health occupations courses
- Certified Athletic Trainer courses

Length:

The activities in this curriculum will last approximately 6 hours. With supplemental materials, this curriculum can be adapted to a longer block of time.

Goal:

To help participants learn the basic principles of traumatic brain injuries as they relate to the sports medicine field.

Synopsis:

The Concussion Education Kit and accompanying curricula will include the combination of a wearable simulation experience and other hands-on opportunities. It will help students walk in the shoes of a person experiencing a concussion as well as understanding what happens in the brain during a concussion injury. Students will receive a thorough introduction to Traumatic Brain Injury and the impact of concussions on the body.

Curriculum Components:

- Teacher's guide – Complete lesson, including detailed steps of activities, time and materials needed, student handouts and instructor information to teach the lesson
- Assessment tools
- PowerPoint presentation slides

Learning Objectives:

Lesson One – Introduction to Traumatic Brain Injury

- Define TBI and list the two most common causes
- Categorize TBI by severity
- Describe focal brain injuries due to TBI
- Describe terms used to describe generalized brain tissue damage
- Describe chronic traumatic encephalopathy (CTE)

Lesson Two – Concussion Signs and Symptoms

- Identify, physical, sensory, cognitive, and behavioral symptoms and signs of concussion
- Identify physical, cognitive, and behavioral signs and symptoms of more severe TBI
- Describe Second Impact Syndrome
- Describe Post-Concussion Syndrome

Lesson Three – TBI Treatment and Prevention

- Describe the fundamental component of mild TBI/ concussion treatment
- Describe general strategies to promote healing in the setting of concussion
- Describe specific treatments for particular concussion symptoms
- Name some emergency treatments and ways of monitoring patients in cases of moderate and severe TBI
- List some preventative strategies to protect against TBI

Lesson Four – TBI Scenarios

- Recognize an example of uncomplicated concussion both with and without skull fracture
- Recognize epilepsy as a consequence of multiple TBIs and brain bleeds as a risk factor for the development of post-traumatic seizures.
- Recognize a case of second impact syndrome
- Recognize a case of chronic traumatic encephalopathy (CTE)
- Recognize a case of post-concussion syndrome